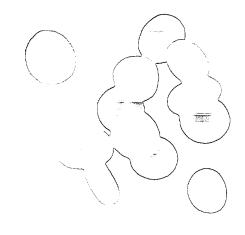




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2001 ANNUAL REPORT

Sangamo BioSciences, Inc. (Nasdaq: SGMO) is the worldwide leader in the research, development and commercialization of engineered transcription factors for the targeted regulation of gene expression. Our technology platform has multiple applications in drug discovery, human therapeutics and plant agriculture.

www.sangamo.com



We dedicate this annual report to the vibrant memory of Alan Paul Wolffe, Ph.D., our chief scientific officer, our colleague, our mentor and our close friend.

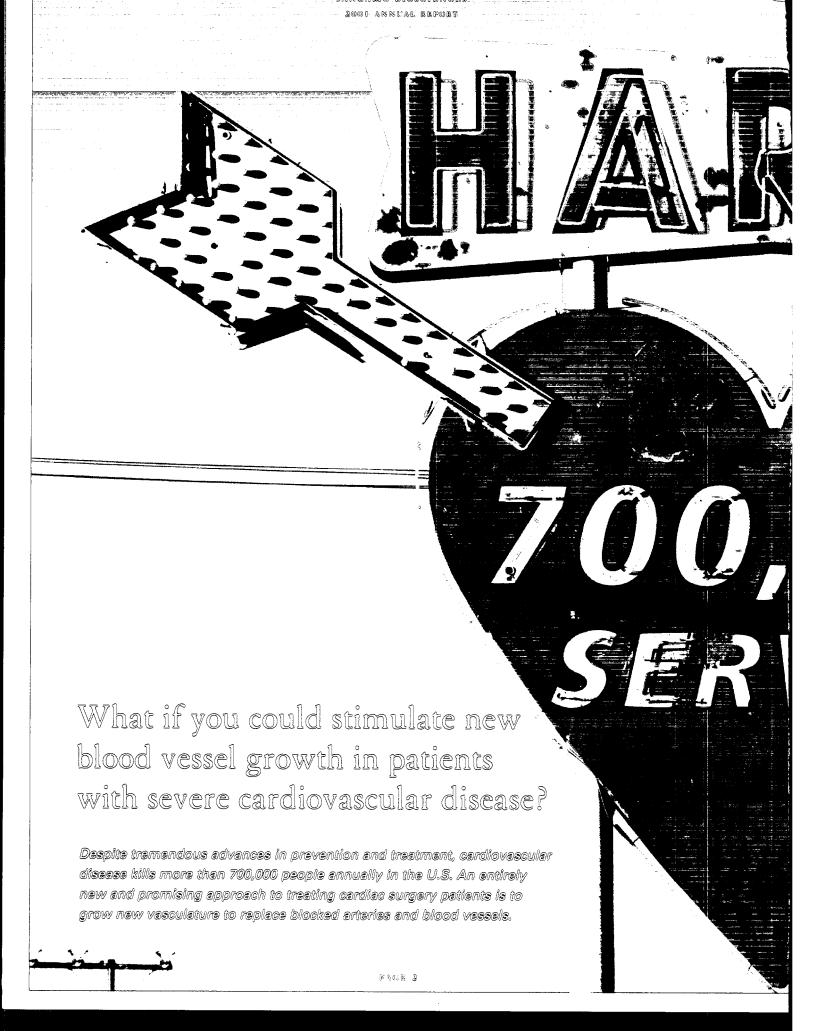
Some statements contained in this Annual Report are forward-looking with respect to our operations, economic performance, and financial condition. Statements that are forward-looking in nature should be read with caution because they involve risks and uncertainties, they are included, for example, in specific and general discussions about: our strategy; sufficiency of our cash resources; revenues from existing and new collaborations; product development; our research and development and other expenses; our operational and legal risks; and our plans, objectives, expectations and intentions and any other statements that are not historical facts. Various terms and expressions similar to them are intended to identify these cautionary statements. Actual results may differ materially from those expressed or implied in those statements due to a number of factors, including technological challenges, our ability to develop commercially viable products, or technological developments by our competitors. For further discussion, please see the "Risk Factors" in our Annual Report on Form 10-K and our most recent 10-Q as filed with the Securities and Exchange Commission. Sangamo undertakes no obligation to publicly release any revisions to forward-looking statements to reflect events or circumstances arising after the date thereof.

At Sangamo BioSciences, we're building a new platform for the development of human therapeutics in the post-genomics cra. Our zinc finger protein transcription factor (ZFP TF) technology can be broadly applied to the regulation of genes from any organism.

We are using ZFP TFs to develop new therapeutics for serious medical conditions including cardiovascular disease and cancer. In addition, more than 25 pharmaceutical and biotechnology companies have applied our ZFP TFs to the study of gene function, small molecule drug discovery, and the development of new antibodies and other pharmaceutical product candidates.

We are inspired by the fundamental power of ZFP TF technology, passionate about our work, and proud of what we have accomplished.

We invite you to learn more about what we do.



SANGAMO BIOSCIENCES 2001 ANNUAL BEPORT

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## ZFP-THERAPEUTICS"

Transcription factors are active in the nucleus of every cell. They bind to specific DNA sequences to regulate gene expression and subsequent protein production. Since the aberrant activity of proteins is the basis for many human diseases, the ability to regulate gene expression has tremendous therapeutic potential. Our ZFP-Therapeutics are designed to activate or repress specific genes relevant to human diseases, including cardiovascular diseases and cancer.

#### Normal. Natural. Reversible.

In many cases, the normal process of gene activation results in the production of a number of proteins that work together to exert a biological effect. Through the use of ZFP TFs engineered to activate a specific endogenous gene, it is possible to mimic this natural process in a way that is not possible with other technologies.

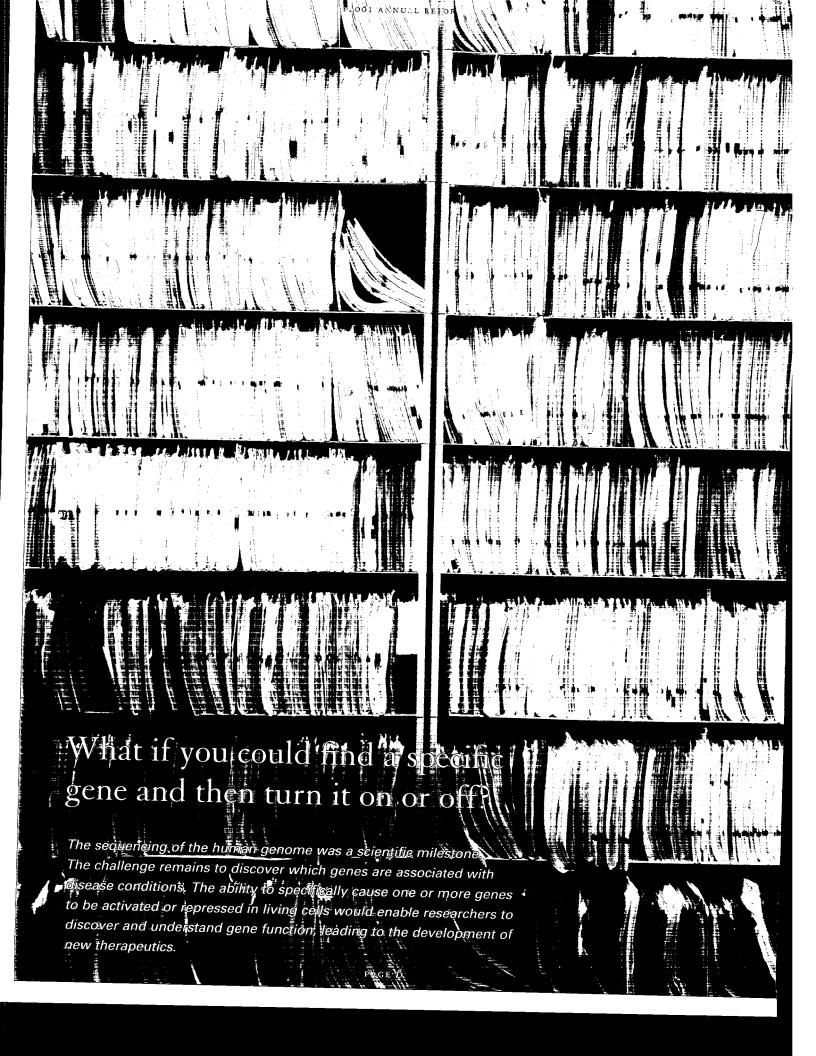
#### VEGF as a Therapeutic Target

Vascular endothelial growth factor (VEGF) is an exciting gene target for ZFP-Therapeutics development in cardiovasular disease, peripheral vascular disease and other applications involving the formation of new blood vessels. Through a collaboration with Edwards Lifesciences, we have created ZFP TFs that stimulate natural expression of VEGF and the development of normal, healthy vasculature. Unlike other approaches to VEGF regulation, our ZFP TFs activate the cell's own VEGF gene. This results in the production of the complete set of VEGF protein variants necessary for the creation of whole, healthy blood vessels.

Single VEGF

A ZFP TF that activates VEGF in a mouse model produces healthy vasculature (left), while administration of a single VEGF variant produces leaky, poorly differentiated blood vessels (right).

ZFP-TF Activated VEGE





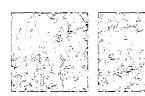
## GENE FUNCTION

The human genome is composed of approximately 3 billion base pairs of DNA organized into 30,000 to 40,000 genes. Since many diseases involve multiple genes, determining the specific role of individual genes, and their potential as daug targets, can be a difficult task using many functional genomics tools.

#### Activate or Repress

Sangamo's Universal GeneTools™ business is uniquely designed to meet the needs of pharmaceutical and biotechnology company researchers who are racing to understand the function of genes and confirm their role in disease processes. Through the use of ZFP TFs, researchers can induce subtle, specific changes in patterns of gene expression in cells or animal models and observe the consequences of those changes. The ZFP approach has distinct advantages over other genetic manipulation tools due to its ease of use, and its ability to both activate and repress gene expression.

An "elegant" (1) example of a Gene Tools application was the recent identification of the specific gene variant critical to adipogenesis, or fat cell development. In collaboration with scientists at Pfizer Inc, we generated ZFP TFs that repressed the PPARy gene and were able to demonstrate that a particular variant, known as PPARy2, was essential to adipocyte differentiation, while PPARy1 was not. This work was virtually impossible to carry out previously and was facilitated by the unique targeting properties of ZFPs.



Expression of PPARy1 alone in PPARy-deficient cells does not induce adipogenesis (left). Expression of PPARy2 is required to achieve cellular differentiation and lipid accumulation (right) (Ren et al., Genes & Development 16: 27-32; 2002)

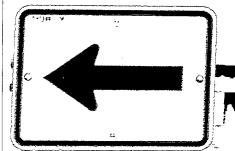
(1) Mitchell Lazar, Genes & Development 16: 1-5: 2002

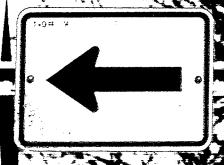


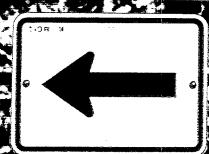
SOUTH SOUTH EAST

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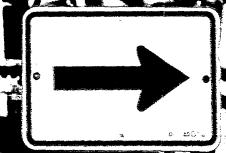






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What if you could find new dru faster and make them more ef

As genes relevant to human diseases are identified, the ability io up regulate their expression in screen identification of promising new drugs used to enhance the manufacturing y and monoclonal antibodies.

systems can speed the regulation can also be of protein pharmaceuticals 2001 ANNUAL REPORT



"Many biopharmaceutical companies face limitations in protein manufacturing capacity due to the difficulty of producing these complex proteins in living cells. Sangamo is working to eliminate this bottleneck by using ZFP TFs to engineer cell lines that increase protein yield."

Andreas Reik, Ph.D. Team Leader, Activation of Gene Expression "The cloned DNA sequences of many therapeutically relevant human genes have been patented. ZFP TFs provide our partners with freedom to operate from an intellectual property perspective because ZFPs regulate naturally occurring, endogenous genes rather than cloned DNA or gene products."

MICHAEL HOLMES, PH.D. Team Leader, Small Molecule Screening Technology

- Through collaborations such as one established with Pharmacia, we are using ZFP TFs to overproduce proteins that have been implicated in specific diseases. The goal is to enable our partners to more quickly assess and quantify the impact of new drugs on protein targets.
- ▶ Sangamo has partnered with Medarex, Inc., a leading human antibody developer, to develop cell lines for the production of greater antibody yields. The agreement with Medarex includes research funding, milestone payments and potential royalties on sales of Medarex antibodies produced with the use of our ZFP TF technology.



## DRUG DEVELOPMENT

Drugs most often work by targeting proteins and interfering with their activity. The drugs themselves may be either traditional small molecule chemical compounds or biopharmaceuticals such as monoclonal antibodies or proteins produced using recombinant DNA technology.

#### Small Molecule Drug Discovery

We are using our ZFP TF technology to assist pharmaceutical companies in creating assays to find new and more effective drugs. For small molecule drug discovery programs, ZFP TFs can be used to create cell lines that express high levels of a particular gene product for which a drug is being sought. Often these targets for drug development are expressed at levels too low for practical use. An added advantage is that by activating the naturally occurring gene within cells, we can assist our partners in avoiding costly intellectual property issues on DNA sequences patented by others. This opens up the world of drug targets for our partners beyond the scope of genes for which they currently own patents.

One example of how we are applying this is in our collaboration with Medarex, Inc. We are using ZFP TFs to generate cell lines that overexpress certain G-protein compled receptors (GPCRs), a class of cell surface receptors widely regarded as an important source of novel drug targets in a number of disease areas. The goal of the collaboration is to develop fully human therapeutic antibody products that target disease related GPCRs.

### Therapeutic Protein Production

The biopharmaceutical industry faces a significant manufacturing challenge: the capacity to produce sufficient quantities of therapeutic proteins. One industry unalyst has estimated that although biopharmaceutical manufacturing capacity is expected to more than triple in the next five years, demand will increase four-fold. Highlighting this need is the fact that one of the most successful biopharmaceuticals introduced in recent years is either unavailable or being "rationed" to some patients because there isn't enough of the drug to go around.

We are creating ZFP TFs to increase the yield of cell based protein manufacturing systems. Our goal is to license this technology broadly to biopharmaceutical manufacturers. We hope to assist them in meeting product demand while at the same time reducing production costs.

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#### Business Model Leveraging Gene Regulation

#### Human Therapeutics

> Antibody development

Protein pharmaceutical

▶ ZFP-Therapeutics™

Drug discovery

manufacturing

- - GeneTools collaborations
  - ▶ In vivo research models
- Agrochemical discovery

Agricultural/Industrial

Biotechnology

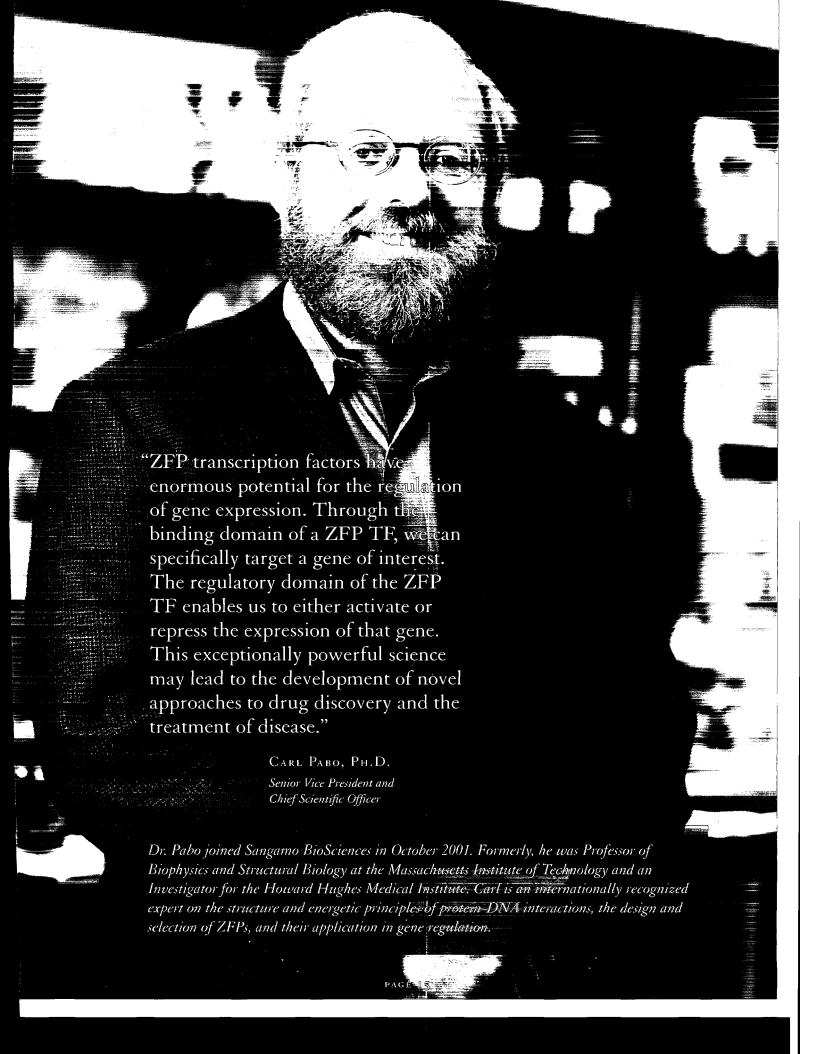
- Biological production of industrial chemicals
- Pharmesegenennies Diegnestiss
- Regulatory DNA sequence detection
- Single nucleotide polymorphism (SNP) identification
- Clinical diagnostics

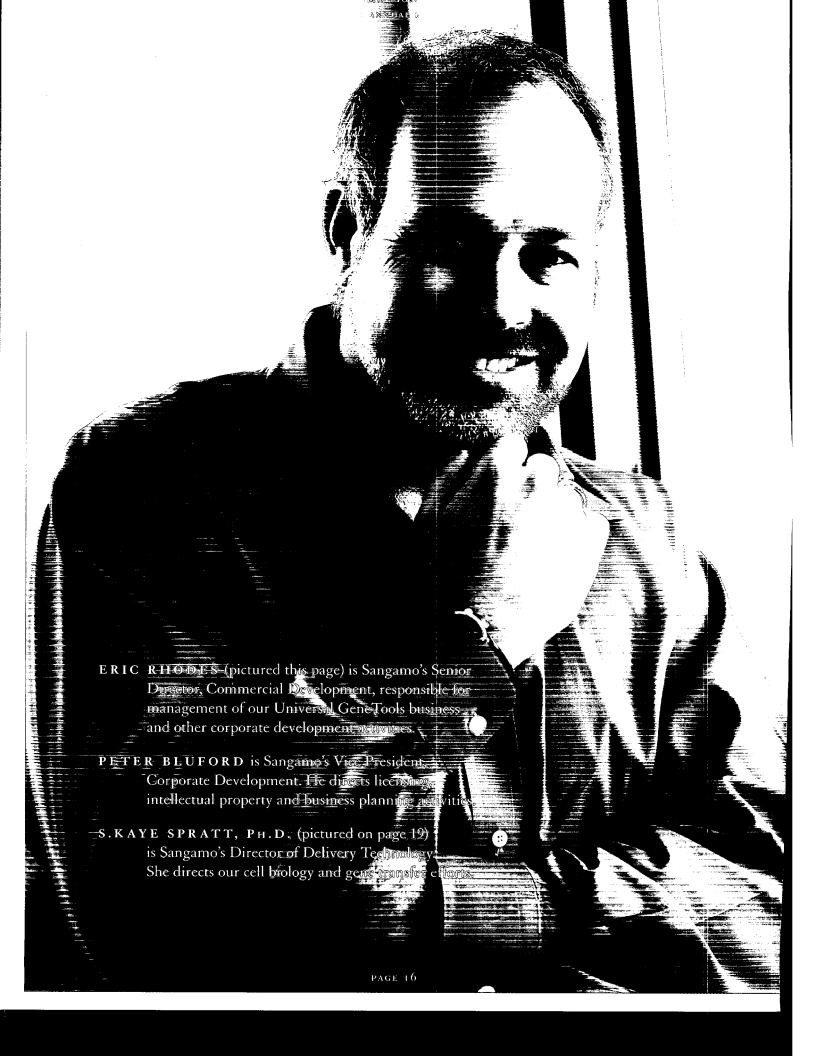
In the era of genome-based drug discovery, pharmaceutical companies need technology that can accelerate the identification and validation of disease-related genes as viable targets for drug development. With validated drug targets in hand, researchers then identify molecules that can interact with these targets in a highly specific way. Sangamo has developed a technology platform that enables the accelerated validation of new drug targets and the generation of novel therapeutic product candidates acting through the regulation of disease-related genes.

Sangamo has signed research collaborations in target validation with more than 20 leading pharmaceutical and biotechnology companies. Additional partnerships have been established to develop novel therapeutics for cardiovascular disease and cancer, create transgenic animal models, develop customized cell lines for small molecule screening and monoclonal antibody generation, enhance the production yield of protein pharmaceuticals, and develop improved seeds for crop production.

#### Sangamo has entered into collaborations with companies including:

AstraZeneca	F. Hoffmann-La Roche	Merck KGaA	Pharmacia
Bayer	GlaxoSmithKline	Merck (USA)	Procter & Gamble
Bristol-Myers Squibb	Japan Tobacco	Millennium Pharmaceuticals	Renessen
Charles River Laboratories	Johnson & Johnson	Onyx Pharmaceuticals	Schering AG
Edwards Lifesciences	Medarex	Pfizer	Zaiya





# The Two-Minute Drill

with Cynthia Robbins-Roth, Ph.D., Founding Editor, BioWorld and BioVenture View

We believe deeply in our ZFP TF technology. We invited Cynthia Robbins-Roth, Ph.D., Founding Editor of *BioWorld* and *BioVenture View*, to moderate a fast-paced Q&A session with members of our senior management team.

CRR: What is the state of ZFP TF technology today?

We've been able to regulate over 500 human genes, as well as genes from species including yeast, mice and plants. We believe we can apply our technology broadly in gene regulation.

CRR: Where does Sangamo stand in the field of gene control?

Sangamo has 21 issued patents and 144 patent applications covering ZFP TFs, including patents has add from the leading research institutions working in this field: MIT, Johns Hopkins and the Scripps Research Institute. Through our acquestion of Gendaq in 2001, we gained rights to ZFP TF technology from the Medical Research Council.

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# CRR: What's next for the Universal GeneTools business?

ER: The market is changing. It's moving downstream from the determination of gene function to the pursuit of molecules that interact with validated targets. We are adapting to this evolution, through small molecule screening collaborations such as our deal with Pharmacia.

# CRR: Aren't all the important genes already patented?

PB: This is a really important point. Many cDNA sequences, or cloned genes, have been patented. What cannot be patented are the endogenous genes themselves. Since our ZFP TFs act only on the naturally occurring gene sequences, we can provide freedom to operate through the regulation of endogenous genes.

crr: What's the take-home message about Sangamo?

ER: That's easy. Six things:

- 1. Broadly enabling technology platform
- 2. Leveraging the genomics revolution
- 3. Clear and validated business model
- 4. Strong balance sheet
- 5. Pre-eminent intellectual property
- 6. Experienced management and talented scientific team

CRR: Thanks!



#### Dear Fellow Stockholders:

2001 saw important progress at Sangamo in the advancement of our ZFP TF-based human therapeutics and the application of our technology throughout the drug discovery and development process.

Developing novel human therapeutics is our number one priority. In October 2001, we delivered our first lead ZFP-Therapeutic™ product candidate, an activator of the VEGF gene for treating cardiovascular and peripheral vascular disease, to our partner Edwards Lifesciences and received a \$1.4 million milestone payment. Also during 2001, we entered into a collaboration with Onyx Pharmaceuticals to use ZFP TFs in a unique approach to cancer immunotherapy, and a collaboration with Medarex to develop antibodies to well-established therapeutic targets. A second agreement with Medarex is focused on the development of cell lines to improve the manufacturing yield of protein pharmaceuticals. And, we have initiated an internally driven therapeutics program, with the goal of developing ZFP-Therapeutics in several major disease areas including cardiovascular diseases, cancer, infectious diseases and degenerative neurological diseases. In short, we are laying the foundation of a new drug development platform for the post-genomics era.

We continue to expand and improve the products we deliver to our partners. An "elegant" example of how our technology can be used to characterize gene function was published in *Genes & Development* by scientists from Pfizer and Sangamo. The scientists used ZFP TFs created at Sangamo to precisely identify the gene variant responsible for fat cell development. This achievement would have been virtually impossible without the highly specific gene regulation properties of ZFP TFs.

Further, as the pharmaceutical industry becomes increasingly focused on genomics-based drug discovery, we have responded by using our technology to regulate gene expression for small molecule drug discovery. We believe there is considerable growth potential for this aspect of our business, and are actively pursuing additional collaborations with pharmaceutical companies.

Over the past several years we have worked hard to establish Sangamo as the world leader in the development of ZFP TFs for gene regulation. Further strengthening our position was the acquisition in July 2001 of Gendaq Ltd., a London-based company co-founded by Nobel Laureate Sir Aaron Klug. This transaction augments our pre-eminent intellectual property position in the ZFP TF field.

#### THE FUTURE — USING OUR STRENGTHS TO CAPTURE VALUE

As an emerging technology company working to create substantial and sustainable shareholder value, we assert that our prospects should be evaluated by the strength of our science, the markets for our products, our intellectual property position, financial resources and the talent and commitment of our people. Here's where we stand.

SCIENCE Our ZFP TF technology platform mimics the mechanism by which life on our planet has evolved to regulate gene expression. This creates enormous opportunities. Our technology is being applied to the development of novel human therapeutics, as well as for small molecule drug discovery, cell- and animal-based target validation applications and plant agriculture.

MARKETS Our initial therapeutics targets are in the important markets of cardiovascular disease and cancer. In addition, our ZFP TF platform is useful throughout the pharmaceutical discovery process from gene function analysis to high-throughput screening, and has resulted in more than 25 Universal Gene Tools collaborations and other partnerships.

PATENTS Our intellectual property position is very strong, with 21 issued patents and more than 144 patents filed worldwide, including those we obtained through the Gendaq acquisition. The breadth and depth of our issued and pending patent coverage was evidenced by the issuance of a patent in the United Kingdom in March 2001 covering the use of ZFP TFs to regulate any gene, in any cell type, in any organism.

FINANCIALS We have a strong balance sheet and a business model designed to maintain it as a strategic asset. In 2001, our cash position decreased by only \$2.1 million, and we ended the year with \$62.6 million in the bank. This represents several years of cash at our current rate of net expenditures. We will continue to invest aggressively in our science while preserving the strength and integrity of our balance sheet.

PEOPLE Finally, we have been successful and fortunate in attracting outstanding people from some of the most prestigious laboratories in the world to Sangamo. While we tragically lost Alan Wolffe, Ph.D., in 2001, we were very pleased to recruit Carl Pabo, Ph.D. from MIT and the Howard Hughes Medical Institute as our chief scientific officer. Our scientific efforts are supported by a world-class Scientific Advisory Board, and our Board of Directors and senior management team are among the most experienced in our industry.

2001 was year of important progress. We are committed to making 2002 a year in which we build on our past successes and work even harder to increase the value of your company.

On behalf of everyone at Sangamo, thank you for your continued support.

EDWARD LANPHIER

President and Chief Executive Officer

Sincerely,



ANGAMO BIOSCIENCES 2001 ANNUAL REPORT

This is what we do. Together we are creating a genomics-based technology platform with vast potential in human therapeutics, drug discovery and plant agriculture.



### Selected Financial Data

Total stockholders' equity

Science I illaticial Data		Year En	ded December 31,
	2001	2000	1999
(in thousands, except per share data)			
Statement of Operations Data:			
Total revenues	\$ 4,885	\$ 3,433	\$ 2,182
Operating expenses:			
Research and development	15,514	11,347	4,266
General and administrative	4,750	4,569	1,822
Acquired in-process research and development	13,062	_	
Total operating expenses	33,326	15,916	6,088
Loss from operations	(28,441)	(12,483)	(3,906)
Interest income (expense), net	3,192	3,417	131
Net loss	(25,249)	(9,066)	(3,775)
Deemed dividend upon issuance of convertible preferred stock	_	(1,500)	(4,500)
Net loss attributable to common stockholders	\$ (25,249)	\$ (10,566)	\$ (8,275)
Basic and diluted net loss per common share	\$ (1.09)	\$ (0.61)	\$ (1.38)
Shares used in computing basic and diluted			
net loss per common share	23,120	17,383	5,991
(in thousands, except per share data)	2001	Year En 2000	ded December 31, 1999
Pro-Forma Operations Data: (1)	2001	2000	1999
Total revenues	\$ 4,885	\$ 3,433	\$ 2,182
Research and development	12,713	7,381	3,875
General and administrative	3,638	2,602	1,694
Total operating expenses	16,351	9,983	5,569
Interest income (expense), net	3,192	3,417	131
Net loss	\$ (8,274)	\$ (3,133)	\$ (3,256)
Basic and diluted net loss per common share	\$ (0.36)	\$ (0.18)	\$ (0.54)
		A	s of December 31,
(in thousands, except per share data)		2001	2000
Balance Sheet Data:			
Cash, cash equivalents, investments, and interest receivable		\$ 62,560	\$ 64,681
Working capital		61,102	64,477
Total assets			
		85,017	68,925
Long-term debt		85,017 —	68,925 —
Long-term debt Accumulated deficit		85,017 — (43,100)	68,925 — (17,851)

You should read this Selected Financial Data in conjunction with the enclosed Report on Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission, including the section "Management's Discussion and Analysis of Financial Conditions and Results of Operations," and the financial statements and notes attached to the financial statements.

66,890

82,349

<sup>&</sup>lt;sup>(1)</sup> Excluded from Pro-Forma Operations Data are charges for stock based compensation, patent amortization, acquisition of in-process research and development and deemed dividends.

## Corporate Directory

MANAGEMENT

**Edward Lanphier** 

President and Chief Executive Officer

Carl Pabo, Ph.D.

Senior Vice President and Chief Scientific Officer

Peter Bluford

Vice President,

Corporate Development

Timothy Brears, Ph.D.

Vice President,

Business Development

Casey Case, Ph.D.

Vice President, Research

Eric Rhodes

Senior Director,

Commercial Development

Kaye Spratt, Ph.D.

Director, Delivery Technology

BOARD OF DIRECTORS

Herbert Boyer, Ph.D.

Professor Emeritus

University of California, San Francisco

Co-founder, Genentech, Inc.

William Gerber, M.D.

Chief Executive Officer

Epoch Biosciences, Inc.

Jon Jacoby

Senior Vice President

Stephens Inc.

**Edward Lanphier** 

President and Chief Executive Officer

Sangamo BioSciences, Inc.

John Larson

Senior Partner

Brobeck, Phleger & Harrison LLP

Stephen Reeders, M.D.

Chief Executive Officer

MVM Ltd.

William Rutter

Professor Emeritus

University of California, San Francisco

Co-founder, Chiron Corporation

Michael Wood

Founder and President

LeapFrog Enterprises, Inc.

SCIENTIFIC ADVISORY BOARD

Carl Pabo, Ph.D.

Senior Vice President and

Chief Scientific Officer

Sangamo BioSciences, Inc.

Jeremy Berg, Ph.D.

Professor and Director of the Department

of Biophysics and Biophysical Chemistry

The Johns Hopkins University School of Medicine

Judith Campisi, Ph.D.

Head, Center for Research and

Education in Aging Life Sciences

Berkeley National Laboratory

Nam Hai-Chua, Ph.D.

Andrew W. Mellon Professor and Head,

Laboratory of Plant Molecular Biology

The Rockefeller University

Sir Aaron Klug, O.M., F.R.S.

Nobel Laureate, Chemistry

Past President, The Royal Society

Kevin Struhl, Ph.D.

David Wesley Gaiser Professor of

Biological Chemistry

Harvard Medical School

Inder Verma, Ph.D.

American Cancer Society

Professor of Molecular Biology The Salk Institute for Biological Sciences

LEGAL COUNSEL

Brobeck, Phleger & Harrison LLP

San Francisco, CA

INDEPENDENT AUDITORS

Ernst & Young LLP

TRANSFER AGENT

EquiServe, L.P.

P.O. Box 43010

Providence, RI 02940-3010

tel: 781 575 3400

www.equiserve.com

COMMON STOCK INFORMATION

Symbol: SGMO

Exchange: Nasdaq

ANNUAL MEETING

The Annual Meeting of Stockholders will be held at 9:00 a.m. on May 30, 2002

will be field at 9:00 a.m. on May 30, 2002

at Sangamo BioSciences, Inc., 501 Canal

Blvd., Suite A100, Richmond, CA

ADDITIONAL INFORMATION

Please visit our website at

www.sangamo.com, or write to:

Sangamo BioSciences, Inc.

Investor Relations

501 Canal Blvd., Suite A100

Richmond, CA 94804

tel: 510 970 6000

fax: 510 236 8951

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